Serial No.: CH2714 US NA
Docket No.: 09/848,896
Page 2

Amendments to Claims

1. (Currently Amended) A process for reversible sorption of sulfur trioxide onto a sorbent comprising a) at a site equipped for handling bulk quantities of sulfur trioxide contacting from about 15% to 100% sulfur trioxide in an inert gas with the sorbent under anhydrous conditions at a temperature of from about 35°C to about 150°C thereby sorbing the sulfur trioxide onto the sorbent which sorbent is then capable of storage, and transporting said sorbent in a container to a site requiring delivery of sulfur trioxide, b) at said site requiring delivery desorbing sulfur trioxide from the sorbent at a temperature of from about 150°C to about 350°C at about atmospheric pressure, or under a vacuum pressure, and transporting said sorbent to said site for handling bulk quantities of sulfur trioxide, and c) recycling said sorbent by continuously repeating steps a) and b), wherein said sorbent has structural stability upon recycle, a pore size of at least 0.5 nm, and consists essentially of silica or zeolite, said zeolite having a silicon to aluminum ratio greater than or equal to about 15, or greater.

- 2. (Cancelled)
- 3. (Original) The process of Claim 1 wherein the sulfur trioxide sorbed and desorbed is of purity of from about 99% to 100%.
- 4. (Original) The process of Claim 3 wherein the sulfur trioxide is of a purity of at least 99.9%.
- 5. (Original) The process of Claim 1 wherein the sorbent has sorbed thereon from about 3% to about 60% by weight sulfur trioxide.
- 6. (Original) The process of Claim 1 wherein the sulfur trioxide is sorbed onto the sorbent at a temperature of from about 50°C to about 125°C.
- 7. (Currently Amended) The process of Claim 1 wherein the sorbent is a <u>silicalite</u> or a zeolite, wherein said zeolite has having a silicon to aluminum ratio of at least 25.
- 8. (Currently Amended) A sorbent consisting essentially of silica or zeolite, said zeolite having a silicon to aluminum ratio greater than er equal to about 15, or greater, said sorbent having a pore size of at least

Serial No.: CH2714 US NA
Docket No.: 09/848,896
Page 3

0.5 nm, and having adsorbed thereon a minimum of about 1% by weight

9. (Currently Amended) The sorbent of Claim 8 which is a zeolite having a silicon to aluminum ratio of at least 25.

sulfur trioxide.

10. (Original) The sorbent of Claim 8 in a pelletized, beaded or chopped form.